

Serial No.: 10/788,891
Art Unit: 1714
Page 2

RECEIVED
CENTRAL FAX CENTER

JUL 11 2007

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of making a modified pigment comprising the step of reacting a pigment having attached a first chemical group with a second chemical group to form a pigment having attached a third chemical group, wherein the second chemical group reacts with the first chemical group to form the third chemical group, and said first chemical group comprises an organic group which comprises at least one electrophile and said second chemical group comprises at least one nucleophile, or vice versa, wherein said pigment having attached a first chemical group is prepared by reacting a diazonium salt having the first chemical group with at least one type of pigment to form said pigment having attached a first chemical group, and wherein the first chemical group, the second chemical group, and the third chemical group each comprises at least one organic group selected from the group consisting of: acyl azides, isocyanates, ketones, aldehydes, anhydrides, amides, imides, imines, α,β -unsaturated ketones and aldehydes, alkyl halides, epoxides, alkyl sulfonates and sulfates, amines, hydrazines, thiols, hydrazides, oximes, carbanions, aromatic compounds which undergo addition-elimination reactions, and salts thereof.

2-4. (Cancelled)

5. (Previously presented) The method of claim 1, wherein the first chemical group comprises an alkylsulfate group.

6. (Original) The method of claim 1, wherein the first chemical group comprises a (2-sulfatoethyl)-sulphone group.

7. (Original) The method of claim 6, wherein the first chemical group is phenyl-(2-sulfatoethyl)-sulphone.

Serial No.: 10/788,891

Art Unit: 1714

Page 3

8. (Original) The method of claim 1, wherein said second chemical group comprises a polymer.
9. (Previously presented) The method of claim 8, wherein the polymer is selected from the group consisting of: a polyamine, a polyalkylene oxide, a polyol, a polyacrylate, and salts thereof.
10. (Original) The method of claim 9, wherein the polymer is a polyamine.
11. (Original) The method of claim 10, wherein the polymer is polyethyleneimine.
12. (Original) The method of claim 1, wherein said pigment is carbon black.
13. (Original) The method of claim 1, wherein said pigment comprises a blue pigment, black pigment, brown pigment, cyan pigment, green pigment, white pigment, violet pigment, magenta pigment, red pigment, yellow pigment, or mixtures thereof.
14. (Previously presented) The method of claim 1, further comprising reacting said third chemical group attached onto said pigment with at least one additional second chemical group, wherein the additional second chemical group comprises at least one electrophile and the third chemical group comprises at least one nucleophile, or vice versa, and wherein the additional second chemical group comprises a polymer.
15. (Previously presented) The method of claim 14, wherein the additional second chemical group comprises a carboxylic acid group, an acid chloride group, or an anhydride group.

Serial No.: 10/788,891
Art Unit: 1714
Page 4

16. (Cancelled)

17. (Previously presented) The method of claim 15, wherein the polymer is selected from the group consisting of: a polyamine, a polyol, a polyalkylene glycol, a polyacrylate, a protein, a polyamino acid, and salts thereof.

18. (Previously presented) The method of claim 15, wherein the polymer is a polyacrylate or methacrylate.

19-20. (Cancelled)

21. (Original) A modified pigment comprising a pigment having attached at least one organic group, wherein said organic group comprises: the reaction product of at least one (2-sulfatoethyl)-sulphone group and at least one nucleophilic polymer.

22. (Original) The modified pigment of claim 21, wherein the organic group is directly attached to the pigment.

23. (Original) The modified pigment of claim 21, wherein the (2-sulfatoethyl)-sulphone group is phenyl-(2-sulfatoethyl)-sulphone.

24. (Original) The modified pigment of claim 21, wherein said nucleophilic polymer is a poly(vinyl alcohol), polyalkylene glycol, polyamine, or combinations thereof.

25. (Previously presented) The modified pigment of claim 21, wherein the nucleophilic polymer is polyethyleneimine or salts thereof.

26-33. (Cancelled)

Serial No.: 10/788,891

Art Unit: 1714

Page 5

34. (Original) An ink composition comprising a liquid vehicle and a modified pigment, wherein the modified pigment comprises a pigment having attached at least one organic group, wherein said organic group comprises: the reaction product of at least one (2-sulfatoethyl)-sulphone group and at least one nucleophilic polymer.

35. (Original) The ink composition of claim 34, wherein the ink composition is an inkjet ink composition.

36-39. (Cancelled)

40. (Currently amended) A method of making a modified pigment comprising the step of reacting a pigment having attached a first chemical group with a second chemical group to form a pigment having attached a third chemical group, wherein the second chemical group reacts with the first chemical group to form the third chemical group, and said first chemical group comprises an organic group which comprises at least one electrophile and said second chemical group comprises at least one nucleophile, or vice versa, wherein said pigment having attached a first chemical group is prepared by reacting a diazonium salt having the first chemical group with at least one type of pigment to form said pigment having attached a first chemical group, and wherein the first chemical group, the second chemical group, and the third chemical group each comprises at least one organic group selected from the group consisting of: acyl azides, isocyanates, ketones, aldehydes, anhydrides, amides, imides, imines, α,β -unsaturated ketones and aldehydes, alkyl halides, epoxides, alkyl sulfonates and sulfates, amines, hydrazines, thiols, hydrazides, oximes, carbanions, and salts thereof.